

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently amended) An apparatus comprising:

a memory storage structure to hold a bundle of instructions;

a buffer, the buffer including an information field, the buffer further including a no-operation instruction (NOP) indicator field; and

folding logic circuit to place, responsive to a NOP in the bundle, a "present" value in the NOP indicator field.
2. (currently amended) The apparatus of claim 1, wherein:

the folding logic circuit is further to allocate the information field for a non-NOP instruction in the bundle.
3. (currently amended) ~~The apparatus of claim 1, wherein:~~ An apparatus comprising:

a memory storage structure to hold a bundle of instructions;

a buffer, the buffer including an information field, the buffer further including a no-operation instruction (NOP) indicator field; and

folding logic circuit to place, responsive to a NOP in the bundle, a "present" value in the NOP indicator field;

the folding logic is to place, responsive to a first NOP in the bundle, a "present" value in the NOP indicator field; and

the folding logic is further to allocate the information field for a second NOP instruction in the bundle, responsive to all instructions in the bundle being NOP instructions.

4. (original) The apparatus of claim 1, wherein:

the memory storage structure is a queue to hold a plurality of bundles.

5. (currently amended) The apparatus of claim 1, wherein:

the buffer is to hold a plurality of entries.

6. (original) ~~The apparatus of claim 1, wherein:~~

An apparatus comprising:

a memory storage structure to hold a bundle of instructions;

a buffer, the buffer including an information field, the buffer entry includes further including a plurality of NOP indicator fields, the number of NOP indicator fields being n-1, where n is the number of instructions in the bundle; and

folding logic to place, responsive to a NOP in the bundle, a "present" value in the NOP indicator field.

7. (original) The apparatus of claim 6, wherein:

each of the plurality of NOP indicator fields corresponds to an instruction in the bundle; and

the folding logic is to place, responsive to each of a plurality of NOP instructions in the bundle, a "present" value in the NOP indicator field corresponding to the respective NOP instruction.

8. (Currently amended) ~~The~~ An apparatus comprising of claim 5, wherein:

a memory storage structure to hold a bundle of instructions;

a buffer, the buffer including an information field, the buffer further including a no-operation instruction (NOP) indicator field; and

folding logic to place, responsive to a NOP in the bundle, a "present" value in the NOP indicator field;

wherein the buffer is to hold a plurality of entries; and

the information field of each buffer entry is ~~capable of holding~~ to hold a result of an instruction in the bundle.

9. (Currently amended) ~~The~~ An apparatus comprising of claim 5, wherein:

a memory storage structure to hold a bundle of instructions;

a buffer, the buffer including an information field, the buffer further including a no-operation instruction (NOP) indicator field; and

folding logic to place, responsive to a NOP in the bundle, a "present" value in the NOP indicator field;

wherein the buffer is to hold a plurality of entries; and

the information field of each buffer entry is ~~capable of holding~~ to hold a decoded instruction.

10. (Currently amended) ~~The~~ An apparatus comprising of claim 5, wherein:

a memory storage structure to hold a bundle of instructions;

a buffer, the buffer including an information field, the buffer further including a no-operation instruction (NOP) indicator field; and

folding logic to place, responsive to a NOP in the bundle, a "present" value in the NOP indicator field;

wherein the buffer is to hold a plurality of entries; and

the information field of each buffer entry is ~~capable of holding~~ to hold a decoded micro-operation.

11. (currently amended) A method comprising:

determining, during execution of a bundle of instructions, a number x of no-operation (NOP) instructions in [[a]] the bundle, the bundle having a plurality (n) of instructions, wherein $0 \leq x \leq n$;

allocating an entry in a buffer; and

providing, if $x > 0$, a "present" value in an indicator field of the entry to specify a NOP instruction in the bundle.

12. (original) The method of claim 11, wherein allocating further comprises:

if $x = 0$, allocating a corresponding entry in the buffer for each of the n instructions.

13. (currently amended) ~~The A method comprising of claim 11, wherein~~
~~providing further comprises:~~

determining a number x of no-operation (NOP) instructions in a bundle, the bundle having a plurality (n) of instructions, wherein $0 < x < n$;

allocating an entry in a buffer;

providing, if $x > 0$, a "present" value in an indicator field of the entry to specify a NOP instruction in the bundle; and

providing, if $x = n$, a "present" value in each of $n-1$ indicator fields of the entry to specify $n-1$ NOP instructions in the bundle.

14. (currently amended) ~~The A method comprising of claim 11, wherein~~
~~allocating further comprises:~~

determining a number x of no-operation (NOP) instructions in a bundle, the bundle having a plurality (n) of instructions, wherein $0 < x < n$;

allocating an entry in a buffer; and

providing, if $x > 0$, a "present" value in an indicator field of the entry to specify a NOP instruction in the bundle; and

if $0 < x < n$, allocating a corresponding entry in the buffer for each of the $(n-x)$ non-NOP instructions in the bundle.

15. (currently amended) The method of claim 14, wherein providing further comprises:

providing, if $0 < x < n$, for each NOP instruction in the bundle a "present" value in a NOP indicator corresponding to the NOP instruction, the corresponding NOP indicator being included in one of the $(n-x)$ allocated buffer entries.

16. (currently amended) A system, comprising:

a dynamic random access memory to store a bundle, the bundle including a plurality of instructions; and

folding logic circuit to allocate a buffer entry for one of the instructions, wherein the buffer entry includes a NOP indicator field;

the folding logic circuit to place a "present" value in the NOP indicator field responsive to the presence of a NOP instruction in the bundle.

17. (currently amended) The system of claim 16, wherein folding logic circuit is further to allocate a buffer entry for a non-NOP instruction of the bundle.

18. (currently amended) The system of claim 16, wherein folding logic circuit is further to allocate a buffer entry for a NOP instruction of the bundle.

19. (currently amended) The system of claim 17, wherein the folding logic circuit is further to place a "present" value in the NOP indicator field responsive to the presence of a second NOP instruction in the bundle.

20. (currently amended) The system of claim 16, wherein:

the bundle includes n instructions;

the entry includes n-1 NOP indicator fields; and

folding logic circuit is further to indicate the presence of a plurality x of NOP instructions in the bundle, wherein $2 \leq x \leq n-1$, by placing a "present" value in each of x indicator fields .

21. (currently amended) The system of claim 20, wherein:

folding logic circuit is further to place the "present" value for a selected one of the x NOP instructions into a selected one of the x indicator fields such that the selected indicator field maps to the location of the selected NOP instruction within the bundle.